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Proceedings at Boston, May 18th, 1881.

THE Society assembled at the usual place and time. The President and all the Vice-Presidents being absent, the chair was taken by Prof. A. P. Peabody, of Cambridge, and later by Rev. W. H. Ward, of New York.

The Treasurer's report for the last year was read, and his accounts audited by a committee appointed for the purpose, and accepted. The summary of accounts is as follows:

RECEIPTS.

Balance on hand, May 19th, 1880,	-	-	-	\$674.06
Annual assessments paid in,	-	-	-	\$570.00
Sale of the Journal,	-	-	-	194.22
Interest on deposit in Savings Bank,	-	-	-	27.57
Total receipts of the year,	-	-	-	791.79
				<u>\$1,465.85</u>

EXPENDITURES.

Printing of Proceedings and Journal,	-	-	-	\$753.25
Expenses of Library and Correspondence,	-	-	-	26.15
Total expenditures of the year,	-	-	-	\$779.40
Balance on hand, May 18th, 1881,	-	-	-	686.45
				<u>\$1,465.85</u>

Bills for printing will soon be due which will nearly or quite exhaust the balance now in the Treasury.

The amount of the Bradley type-fund is at present \$848.52.

The report of the Librarian showed the accessions to the Library during the year to consist of forty-six volumes, sixty-three parts of volumes, forty-three pamphlets, and four manuscripts: the number of titles of printed books being now 4,046; of manuscripts, 148. Among the gifts is a magnificent work, published at the expense of the Government of the Netherlands, and by it presented to the Society, on the Buddhist temple of Bôrô-Boudour in the island of Java, consisting of 418 royal folio plates and a descriptive text in Dutch and French.

The Committee of Publication reported that the twelfth volume of the Journal, containing the Index Verborum to the Atharva-Veda, ordered published last year, was on the point of completion, and would be distributed to members doubtless within a month; also, that progress had been made with the earlier-

begun eleventh volume, of which the first part might be expected to be finished in the course of the year.

The Directors gave notice that they had appointed the autumn meeting of this year to be held in New Haven, on the last Wednesday (26th) of October. Also, that they had continued the Committee of Publication of last year for another year. Further, they recommended to the Society the election as Corporate Members of the following persons :

Prof. Maurice Bloomfield, of Baltimore, Md. ;
 Rev. F. F. Ellinwood, of New York ;
 Mr. E. W. Hopkins, of Bridgewater, Mass. ;
 Rev. L. F. Mills, of Hanover, Germany.

The gentlemen thus proposed were then balloted for, and declared duly elected.

The election of officers for the ensuing year being next in order, a letter was read from Prof. Salisbury, of New Haven, positively declining to be a candidate for re-election as President. Prof. Abbot, of Cambridge, also requested to be relieved, after nearly thirty years of service, of the duties of Recording Secretary. These communications were referred to a Nominating Committee, which brought in and proposed the following Board of Officers, and it was elected without dissent :

President—Prof. S. Wells Williams, LL.D., of New Haven.

Vice-Presidents—Messrs. Clark, Parker, and Woolsey (as last year).

Recording Secretary—Prof. C. H. Toy, D.D., LL.D., of Cambridge.

Corresponding and Classical Secretaries and Treasurer and Librarian, Messrs. Whitney, Goodwin, and Van Name (as last year).

Directors—Messrs. Cotheal, Short, and Ward, of New York, Peabody and Lanman, of Cambridge, and Thayer, of Andover (as last year), and Prof. Isaac H. Hall, Ph.D., of Philadelphia.

The presiding officer (Prof. Peabody) then communicated to the meeting the names of the members who had deceased during the preceding year : namely, of the Corporate Members—

Rev. Rufus Anderson, of Boston ;
 Prof. J. L. Diman, of Providence, R. I. ;
 Prof. W. C. Fowler, of Durham, Conn. ;
 Prof. S. S. Haldeman, of Chickies, Pa. ;

and of the Corresponding member—

Rev. S. F. Brown, of Japan.

Prof. Peabody spoke at considerable length of the venerable Dr. Anderson, his own early teacher and life-long friend, describing and extolling his many virtues of character, his long years of devoted service to the cause of Christian missions, his warm interest, in connection with that cause, in studies relating to East-

ern language and history, and his contributions to them. The Corresponding Secretary called attention to the fact that he was the last survivor in the Society of its band of founders, having been a Director from the beginning and for many years a Vice-President, till age and infirmity led him to decline a re-election as such; and read extracts from the first records (1842), showing the active part taken by him in its earliest proceedings.

At the invitation of the chair, Prof. Williams of Brown University paid an eloquent tribute to the memory of his colleague Prof. Diman, dwelling upon the loss which American letters had sustained by the early death of this distinguished scholar and teacher.

The Corresponding Secretary recounted the services of Prof. Fowler to the study of American history and of the English language; and he gave a brief sketch of the life and works of Prof. Haldeman, who, from being a student of natural science, had passed to the study of phonetics, taking high rank by the production of his Trevelyan Prize Essay (1860), and during the latter part of his life had devoted himself mainly to philology, publishing many works, and being especially active in connection with the American Philological Association.

Dr. Ward gave some account of the long and efficient missionary labors of Dr. Brown, continued, with intermissions, for nearly forty years, in China and Japan.

Extracts from the correspondence of the past half-year were read by the Corresponding Secretary.

Mr. R. A. Guild, Librarian of Brown University, of Providence, R. I., communicates the information that the University has lately received from Burma a complete copy of the Buddhist sacred books, in Pāli. The donor, Rev. J. N. Cushing, writes respecting them:

"The set of books belonging to the Betagat (*Tripitaka*) is complete, as the Burmans accept them. Doubtless the text is imperfect, for there are always more or less errors in every palm-leaf book copied. All that I can say is that the books are such as any priest teaching Pāli, in his Kyoung, would use. . . . Those having the bright gilding and vermilion covers come from Mandalay, where the art of palm-leaf book-making flourishes in its greatest perfection. These are new books. Some of the others have long been used in monasteries." . . .

Prof. Isaac H. Hall writes from Philadelphia, in reference to the Greek Inscription from Beirût, communicated to the last meeting (see Proceedings for Oct. 1880, above, p. xli.), that the emendations then conjecturally made in it prove, on renewed examination of the original by a friend on the spot, to be the true readings of the monument itself.

Dr. S. Merrill, of Andover, called the Society's attention to the fact that the inscription in question had already been published, in Boeckh's *Corpus*, vol. iii., and also in the *Bibliotheca Sacra*, vol. v., p. 588.

Prof. Hall also sends a brief account, with transcription and translation, of a charm picked up, a year or two ago, by an American gentleman in Jerusalem, near the pool of Siloam. It was enclosed in a tightly sealed little tin box.

"The paper contains one short titular line, and six other lines, written in a Hebrew character that is rather difficult to read, but which would be called Rabbinic; but about two thirds of the last line are composed of Arabic numerals, carelessly written. Beneath is a square of sixteen spaces, with Arabic numerals in all the spaces, and an Arabic name written outside of each of the four sides. The language is a Chaldaised Hebrew, with at least one Arabic peculiarity, the use of the article. The following is the translation:

"May the work of Satan prosper!

"I conjure you, ye the evil spirits of the evil spirits of Asmodai the King of the evil spirits and Rex Tartaroth, king, and Meimôn and Zuba'h and Bürkân and Mûrhab and Shemhöresh, and the red king and the white king, that ye shall put into the heart of Mehmed the son of 'Eliya fire and brimstone of mighty love, flame of Jah, that he may neither eat nor drink until he shall have done instantly the wish and will of Karmuz the son of Sügma, so that he may fulfil his request, and not delay in the least nor bring to naught, through the force of those names that are set over the moon, Liakim, Liaki', Liakir, Liälgö, Liäröth, Liärösh [each name twice], and in the Name, and the sons of Korah, Assir and Elkanah and Abiasaph and Elde'a."

"The numbers of the last line, when turned into Hebrew characters by their numerical values, seem to make no continuous sense. The numbers in the square, similarly treated, signify 'Love, mighty fire, flame mighty;' the words about it are the names Gabriel, Michael, 'Ursael, Asrafel."

Rev. L. F. Mills, now residing at Hanover, in Germany, writes under date of March 6, 1881, giving an account of his labors on the Avestan Gâthās, and of the publication of their results in which he is now engaged, and enclosing a few specimen pages of the latter.

Mr. Mills's edition includes the Avestan text, with transliteration and verbatim and free translations (the former in Latin); the transliterated Pahlavi version with critical notes and translation; Neriosengh's Sanskrit version in transliteration and translation; and the (transliterated) Persian Pahlavi described below. The Pahlavi version of the Gâthās, as of the rest of the Yaçna, has hitherto rested on a single MS., published by Spiegel; Mr. Mills is placed, by the kindness of Dr. F. W. West, in possession of the collation of another MS. of about the same age, lent him by Destur Hoshangji Jamsapji in India; and also had the loan from the Munich Library of a copy made for Haug just before leaving India from a Pahlavi text in Persian characters, with interlinear Persian translation (mixed with Parsi and Arabic). It is not known from what source this latter text comes; in the difficult task of its decipherment Mr. Mills has again had assistance from Dr. West. It was found a valuable umpire between the other two texts, but so far independent that its own publication was deemed also desirable. The translation of the Pahlavi founded on these authorities has been revised by West, and in part by Spiegel; the former's suggested alterations, where not accepted and incorporated by Mr. Mills, the latter intends also to publish in full. For Neriosengh's Sanskrit, Mr. Mills has received from Spiegel notes of a collation of another Copenhagen MS.; and the same scholar has revised his work. An elaborate commentary is to follow, in which will be reported the opinions on every point of the author's predecessors, both Asiatic and European (except Anquetil); and there will be added glossaries of Pahlavi, Sanskrit, and Persian words, and a complete Index Verborum to the Gâthās themselves, with references to the explanations of each word. It is hoped that the volume will appear in little more than six months.

Mr. Mills's letter gives a succinct review of the condition of the Avestan field at the present moment, showing the timeliness of his undertaking. He was first drawn toward it by a desire to examine the connection between Zoroastrianism and orthodox Pharisaism. He has the approbation and counsel and aid of the leading scholars of Europe in this department, and hopes to gain the sympathy and support of Americans also.

Communications were now presented, as follows:

1. Remarks on Guyard's theory of Semitic Internal Plurals, by Prof. C. H. Toy, of Cambridge.

The Semitic broken or internal plurals have commonly been regarded as collectives (the language treats them as singular feminines), in which the numerical extension is indicated by an inward extension of form, as it is in the external plural by an addition at the end. There are difficulties in this view, one of which is that some of the broken plurals show also additions at the end, and Derenbourg (*Journal Asiatique*, June 1867) held the form in *ân* to be a real external plural.

A few years later (1870), M. Stanislas Guyard extended this suggestion of Derenbourg's so as to include all the broken plurals, which he endeavors to show are nothing but remnants, more or less disguised, of the regular external plural, somewhat as from English *man* we have *men* for *men-er*. He makes the following classes: 1. forms showing the regular plural ending, with or without nunation or mination—as *ân*, which is dual-ending in Arabic, and plural in Ethiopic and Aramaic, *ay*, plural in Aramaic, and *î*, plural in Hebrew (as, *debârî-m*); 2. such as have lost the termination, but preserve the internal vowel-modification consequent on the addition at the end—as *kitâl* (from which *aktâl* by prosthetic Elif), for *kitâli*; 3. those which show the sequence *a-â-i*, occurring in plurals like *arâdi*, and thence extended by analogy to all quadriliterals and to other forms; and the sequence *u-û*, imitated from biliteral plurals such as *sunûna* from *sanat*; 4. those which have substituted for the plural termination the feminine ending *t*. All other forms called in the grammars internal plurals he regards as true collectives, and not plurals.

This explanation is in many respects an attractive one. It accounts for a part of the facts in a satisfactory manner; it gets rid of an apparent anomaly in South Semitic inflection; and it is in accordance with what we know of the prevailing genesis of the plural (by addition at the end) in all families of languages. In its turn, however, it presents serious difficulties.

It supposes that Arabic and the other Southern dialects have a double plural system, retaining the full Semitic form as a living inflection, and alongside of it the same plural in curtailed shape, and also living, except that its plural character has been forgotten and it is treated as a feminine singular. This seems to be highly improbable. Modern Arabic has not stood still in the path of phonetic degradation; it has dropt the nominative, using the old genitive *îna* for all cases; and further, has largely given up the external in favor of the broken plural. But it keeps the two classes distinctly apart. This theory supposes that long ago the language had not only already gone further in the same direction of phonetic change, but, after having produced a curtailed plural, had lost consciousness of its plural character and treated it as a singular. Such a transformation at such a time seems hardly credible.

Further, the theory involves a non-Arabic system of internal vowel-change. The plural *arâdi* from *ard* M. Guyard compares with Hebrew *debârim* from *dâbar* or *melâkim* from *malûk*, and sees in the two the same broadening of the pretonic vowel. This, however, is distinctively Hebrew, and not Arabic; the latter shows no such vowel-movement. A similar objection holds to the comparison of Arabic *nisâ*, 'women,' with Hebrew construct *nesê* and Syriac *nêšê*. It is the transference of the phonetic usages of one dialect to another, without historical grounds.

There is nothing in the vowel-systems of these plurals that demands such a theory for its explanation. All the forms occur as infinitives, or as adjectives and nouns. The fact that quinqueliterals in making the plural reject one letter in order to have just space for the vowel-sequence *a-â-i*, on which M. Guyard is disposed to lay much stress, is not peculiar to the internal plural; a similar device is adopted in forming diminutives and relative adjectives in *ya*, in both cases from a dislike to five-lettered words; or, if the aim be to maintain a certain vowel-sequence, such sequence arises in the diminutive not through an external addition, but by a mere internal modification, and may so have arisen in the case of the plurals.

Lastly, this theory fails entirely to explain certain of the internal plurals (monosyllabic and dissyllabic triliterals), and these M. Guyard throws out of the category of plurals, and regards as singular collectives. The language, however, makes no distinction between them and the others, and so arbitrary a separation

of the forms is unjustifiable, especially as collectives proper are in Arabic carefully distinguished from those plurals.

In spite, therefore, of the attractive simplicity of this explanation, and the ingenuity and learning with which it is presented by its author, it seems to labor under difficulties which, if not fatal, at least make it impossible for us to accept it till new light has been thrown on the facts.

2. On Darmesteter's Translation of the Vendidad, by Prof. J. Luquiens, of Boston.

Prof. Luquiens presented a review of this work of Darmesteter's, which constitutes the fourth volume of Müller's series of Sacred Books of the East. His paper ended with the following conclusions: Considered from a literary point of view, the work leaves little or nothing to desire; it is a bright and spirited rendering of a book which was not held to be either bright or spirited. If the chief aim of M. Darmesteter was to bring out in the strongest light the best sense to be elicited from the tradition, he has been eminently successful; this result, however, seems an honor paid to the native commentators at the cost of a strict adherence to the text and to the most progressive methods of exegesis. As far as the coloring and subinterpretation of the Vendidad by the naturalistic myth are concerned, one must regret the hastiness, and yet admire the faith, which led him to thus irrevocably identify the fate of his work with that of theories not yet risen from the hypothetical stage.

3. On the Metres of the Rig-Veda, by Mr. W. Haskell, of New Haven; presented by the Corresponding Secretary.

The object of Dr. Haskell's paper is to make a statistical exhibition of the fundamental facts of Rig-Veda metric, as a necessary basis for future more detailed examination of the subject, having especially in view these three points: 1. what are the actual metres used, as opposed to those artificially distinguished and named by the Hindu commentators; 2. what is their comparative frequency; 3. what is the general metrical usage or law of each, as determined by an enumeration of quantities in a number of specimen verses.

The metres are arranged on a (provisional) theory as to their historical relations, as follows: that the *anustubh* pāda, of eight syllables, is the most primitive, and the *anustubh* metre, of four such equal pādas, its normal form of occurrence, *gāyatrī* and *pankti* etc. being the variations of this; that the 8-syllabled pāda is extended to one of twelve syllables more or less regularly alternating with the former, in the *br̥hati* and other kindred metres; that the *jagati* is then made by putting together four 12-syllabled pādas; that the *tristubh* pāda, of eleven syllables, is a shortened *jagati*; and that the 5-syllabled pāda, of the *dvipadā viraj*, is a syncopated *tristubh*. There are not, either in the Rig-Veda or in the Atharva-Veda, any other metrical elements than these; all other so-called metres are various combinations of these elements, or imperfect and irregular verses, of varying degrees of irregularity, rising sometimes even to entire absence of traceable metrical form.

The order of the metres in respect to frequency is a very different one from this. Here (omitting the minor variations and doubtful cases) the *tristubh*, of four 11-syllabled pādas, comes first, reckoning about 4200 verses, or over two fifths of the whole Rig-Veda: the *gāyatrī*, of three 8-syllabled pādas, stands next, with near 2450 verses (occurring especially in the 1st, 8th, and 9th Books); then the *jagati*, with near 1300 verses; the *br̥hati*, *satob̥r̥hati*, *us̥nīh*, and other combinations of 8-syllabled and 12-syllabled pādas (especially in the 8th Book), near 1200 verses; the *anustubh*, over 800 verses; the *pankti* etc., of more than four 8-syllabled pādas, about 250 verses.

An enumeration of the heavy and light syllables, now, in fifty *anustubh*-verses (with omission, here as later, of a few syllables of doubtful value) gives the following results:

	syllables,	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.
	light	87	33	52	31	186	8	189	104
Anustubh:	heavy	108	163	144	164	9	187	7	92

The pāda of this type, accordingly, is one having a very marked iambic movement in its last half (the final syllable being, as in Greek and Latin, indifferent), and a very weak iambic movement, consisting only in the greater preponderance of heavy syllables in the second and fourth places, in its former half. The different pādas show no difference of structure that is worthy of remark—unless it be that at the end of the first and third pādas the heavies are more frequent (namely, 54) than at the end of the second and fourth (only 38). The marked excess of heavy syllables throughout the whole former half of the pāda is, as will be seen below, a feature shared by the 8-syllabled pādas of all the other metres. The preponderance of lights in the concluding syllable of the pāda belongs to all the metres without exception, and appears to indicate only the real indifference of that syllable, the greater natural frequency of light syllables showing itself there without hindrance.

A similar enumeration for the other common pādas of eight syllables—namely, the *gāyatrī*, *pankti* (pādas *a-d*), *uṣṇih* (pādas *a, b*), *br̥hatī* (pādas *a, b, d*), and *satobr̥hatī* (pādas *b, d*)—is as follows:

	syllables,	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.
Gāyatrī:	light	64	38	42	34	135	17	128	96
	heavy	85	109	105	110	14	130	21	54
Pankti:	light	85	61	62	44	179	12	190	138
	heavy	113	138	137	155	20	187	9	65
Uṣṇih:	light	43	20	29	18	89	10	97	63
	heavy	55	77	70	80	10	89	2	36
Br̥hatī:	light	64	41	36	49	146	6	150	98
	heavy	86	109	114	101	4	144	0	52
Satobr̥hatī:	light	42	14	42	17	92	9	96	62
	heavy	55	83	55	80	5	87	1	35

There seem to be no noteworthy differences of structure in these varieties of the 8-syllabled pāda: only the *gāyatrī* shows a larger number of exceptional quantities than the others in its latter half. This is in accordance with the general greater irregularity of the *gāyatrī*, rising even to a tolerably well-pronounced trochaic movement and cadence in certain hymns or parts of hymns; such have been avoided in the enumeration here made.

The total number of light and heavy syllables in the enumerated pādas of the six metres is given below, along with a reduction to percentages, and statement of the limits within which the percentages vary (as between the different metres, as above reported):

	syllables,	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.
	light	385	207	263	193	827	62	850	561
	heavy	502	679	625	690	62	824	40	334
per cent.	light					93.0		95.5	62.7
	heavy	56.6	76.6	70.4	78.1		93.0		
	limits	55.4-57.3	69.3-85.6	56.7-76.	67.3-84.1	90.-97.3	88.6-99.	85.9-100.	53.1-65.3

Taking up, now, the pādas of twelve syllables, there is a noteworthy difference between the *uṣṇih* (8 + 8 + 12) on the one hand, and the *br̥hatī* (8 + 8 + 12 + 8) and *satobr̥hatī* (12 + 8 + 12 + 8) on the other (these three constituting more than four fifths of the whole number of mixed eight and twelve-syllabled pādas, and the others being mainly extensions and variations of them). In the *uṣṇih*, the 12-syllabled pāda seems essentially an 8-syllabled one of the usual form, with four more syllables added at the end; as will appear from the following enumeration of a hundred pādas (half of them being those belonging to the 8-syllabled *uṣṇih* pādas already reported):

	syllables,	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.	xi.	xii.
Uṣṇih:	light	49	16	38	13	75	42	76	16	94	2	95	68
	heavy	50	83	61	86	24	56	23	82	5	96	4	31

The iambic movement of the middle quaternion of syllables is sufficiently marked, although by no means so cogent as that of the second quaternion in *anustubh* and *gāyatrī* etc.; it is especially faint in the sixth syllable, where the heavy do not very greatly exceed in number the light quantities.

In *brhati* and *satobrhati*, the middle quaternion has a quite other character: its first three syllables are prevailingly light, and the second of them (which in *uṣṇih* was prevailingly heavy) is more uniformly light than either of the others, while the first is oftener heavy than the third. Thus:

	syllables,	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.	xi.	xii.
Bṛhati:	light	49	15	45	12	57	91	62	10	97	1	99	61
	heavy	51	85	55	88	43	8	38	90	3	99	1	39
Satobrhati:	light	38	15	34	13	57	76	66	5	89	5	95	70
	heavy	58	81	62	82	39	17	31	92	8	91	2	27

This looks like an expansion of the ordinary 8-syllabled *pāda* by an inserted element, tending toward the form — — — — (more nearly, in actual fact, — — — —).

The *jagatī* and *tristubh* *pādas* agree quite closely in their metrical structure with this. As they are in all respects accordant with one another, save that the *tristubh* is catalectic, their enumeration may be presented together, thus:

	syllables,	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.	xi.	xii.
Jagatī:	light	99	18	120	24	104	164	138	2	190	2	193	117
	heavy	95	175	74	170	89	23	56	192	4	191	1	77
Tristubh:	light	115	26	105	24	116	166	100	5	186	4		120
	heavy	82	172	92	171	80	27	97	192	11	193		68

The metrical movement of the second and third quaternions of syllables here is in no important degree different from what it was in the two preceding metres. On the other hand, the iambic character of the first quaternion is rather more marked, the light quantities even predominating over the heavy in the first and third syllables. No great stress, however, is to be laid upon this: in almost any set of verses examined, the preponderance will be found to be on the one side and on the other in different *pādas*; in another set of about 65 *tristubh*-verses whose syllables were enumerated, the heavy quantities were found to be, in all the *pādas* together, slightly in excess of the light; and in the 50 *brhati* *pādas* belonging with the 8-syllabled *pādas* first reported, light syllables are in the majority in the first and third places.

The summary of quantities, then, with percentages and limits of variation, for the 12-syllabled *pādas* of *brhati* and *satobrhati*, the *jagatī* *pāda*, and the *tristubh* *pāda* (counting its eleventh syllable with the twelfth of the others), is as follows:

	syllables,	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.	xi.	xii.
	light	301	74	304	73	334	497	366	22	562	12	387	368
	heavy	286	513	283	511	251	75	222	566	26	574	4	211
per cent.	light	51.3		51.8		57.1	86.9	62.2		95.6		99.0	63.6
	heavy		87.4		87.5				96.3		98.0		
limits,	l. 58.4	84.3	l. 61.9	86.3	53.9	81.7	50.8	90.0	91.7	94.7	97.9	60.3	
	h. 59.2	90.7	h. 64.6	88.0	59.4	91.9	71.1	99.0	98.0	99.0	99.9	72.2	

For the *dvipadā virāj*, the thirty-one verses of i. 65–70 have been enumerated. The results are given for two successive *pādas*, because the uniform and decided prevalence of heavy syllables at the end of the first *pāda* of each pair (standing,

if the provisional theory stated above be correct, in the place of the fifth and sixth syllables of a *tristubh* appears to have a bearing of some importance on the view to be taken of the metre. Thus:

syllables,	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.
Dvipadā Virāj:	light 53	5	93	4	21	65	7	103	6	65
	heavy 69	117	29	118	100	56	113	18	115	56
	light		76.2			53.7		85.1		53.7
per cent.	heavy 56.6	95.9		96.7	82.6		94.2		95.0	

The usual cæsura after the fifth syllable is wanting in the fourth double pāda of 68.1, and in the third of 70.5; and the same is the case in the first of vii. 34.17: a strong indication that the whole is essentially one pāda. The occasional occurrence of an unsynopated *tristubh* pāda among *dvipadā virāj* pādas also helps to illustrate the transition: e. g. vii. 34.7 (second half); and, where the one metre changes to the other, vii. 34.21 (second half); 56.10 (do.).

Any treatment of the other mixed metres, and of the irregular and defective verses, is reserved for a later communication.

Dr. Haskell acknowledged the constant counsel and assistance of Professor Whitney in classifying and presenting the facts gathered by him. The suggestion of the true character of the *dvipadā virāj* he owed to Professor Lanman.

4. On the Sāṅkhya Philosophy of the Hindus, by Prof. C. C. Everett, of Cambridge.

It was maintained in this essay that the Hindu systems of philosophy differ among themselves fundamentally in regard to the view taken of the principle of subjectivity; and that the difference in the accounts of the external world given by the various systems results from the difference in the conception of this principle. What may be called the Vedic system assumed the subjectivity of all knowledge and experience. Those early thinkers had discovered that man cannot get beyond himself. The world was to them a dream-world, and thus unreal. This view is implied in the Upanishads; it is distinctly affirmed, and analyzed into certain proximate elements, in the Vedānta; and by some later commentators is pushed to the logical extreme of an absolute solipsismus. The Sāṅkhya system, on the other hand, affirmed the objective reality of the universe. It met the opposing view with the only reply that could be logically effective. It found an element of objectivity necessarily present in the very form of subjectivity insisted upon by the Vedānta. It admitted in effect, at least in a certain sense, the dream-like nature of the world, but maintained that the dream as such was real and objective.

To make clear this statement, we must examine the nature of the soul (*puruṣa*) according to the Sāṅkhya system. The soul was, to it, pure intelligence, without emotion or causality. This view of the soul has been regarded as meaningless and absurd by all western commentators who, so far as known to the essayist, have expressed any opinion upon the subject. But the idea of the soul must furnish the key to the whole system; and if this is not understood, the system cannot be understood. It is important then to ask how this view of the soul was reached. We find indications of the method used. The existence of the soul as distinct from the body is shown by the fact that I speak of "my body." "I" must then be something distinct from my body. If it is objected that we also speak of the body of a statue, the answer is that this is pure tautology, the statue and its body being one. This reasoning we may carry further. Just as we say "my body," so we can also say "my mind," "my thought," "my feeling." Mind and thought and feeling must then be as distinct from the "I" as the body is. This may be illustrated in another way. We can not only say "I know;" we can also say "I know that I know." We may thus have a *regressus* into the infinite. This *regressus* the Sāṅkhya philosophers had too much common sense to admit; and the "I" is posited as lying behind all consciousness. A similar *regressus* into the infinite is possible in the opposite direction. We can ask of any-

thing "What is its cause?" and again, in regard to the cause assigned, "What is the cause of it?" and so on forever. Here the common sense of the Sankhyans affirmed *prakṛiti*, which was simply and avowedly to give the resting place needed. We must especially recognize the fact that in the search for the "I," and in that for the first cause of objective being, the movement is in opposite directions; and further, we must observe that all which we leave behind us in seeking the first cause is one of its effects, and thus belongs to it. Whatever on the contrary we leave behind in seeking the ultimate *ego* is cast off from it, and thus is foreign to it. The subject flees from the object, and, as it flees, it flings off one covering after another, until it stands naked and alone. While these views are implied in the whole discussion of this subject in the Sankhyan literature, and especially in the Aphorisms of Kapila, they are perhaps most distinctly stated in the Aphorisms of Patanjali. Here, two counter hypotheses are suggested to account for consciousness. One, that the "mind" is directly self-conscious and thus needs no *ego* behind it; the other, that self-consciousness is produced by memory. The first suggestion is rejected because "attention to two objects does not take place simultaneously" (Patanjali, v. 19). The other is rejected because "it would require a cognition of the cognition": that is, it would involve a *regressus* into the infinite (ibid. v. 20).

It will thus be seen that a profound psychological analysis underlies the Sāṅkhya system. The subject, when we come to the last analysis, is but a single point over against the whole world beside. We understand also how real objectivity was reached, a result that had baffled the Vedāntin. The nature of the difference in the views of the outward world held by the two systems is also obvious. To the Vedāntin, the illusion which forms the essence of the universe exists in and through the subject. It is the soul that is the basis and sphere of all. On the other hand, the soul, according to the Sāṅkhya system, being the one inmost point of subjectivity, "Intellect," which fills the place held by illusion to the Vedāntin, becomes wholly objective. It cannot have its basis and support in the soul. The necessity of finding a basis and substance for it elsewhere leads to the notion of *prakṛiti*, which is merely this substantial basis of "Intellect." So, in the one system, we have the series of "sheaths" wrapping the soul, sheaths of "Ignorance," growing more and more dense as they overlie one another; and, on the other, we have the same forms of existence produced in a series by "Intellect," "the great one," or by *prakṛiti*, that works through it.

We see also the hope of deliverance which this view of the soul was fitted to bring to these thinkers, burdened by the thought of the evils of existence. If the soul is a mere spectator, it can leave when the show grows wearisome. Or rather, if it has no organic relation with the objective world, it has only to become conscious of this fact, to know itself to be free. This "discrimination" (from which perhaps comes the name of the system) is all that is needed. Through it, the soul that fancied itself bound knows that it is free.

The essay discussed, along with the views here presented, the nature of the three "qualities" (*guṇa*), the relation of the system to religion, and other points connected with it.

5. On Relative Clauses in the Rig-Veda, by Prof. J. Avery, of Brunswick, Me.

Prof. Avery discussed in a statistical way the subject of relative clauses in the Rig-Veda, so far as concerns their position with reference to the corresponding antecedent clauses, and also the various modes of treating the antecedent word. All passages had been collected and classified containing derivatives of the relative root *ya*: excepting, however, *yad*, *yadi*, and *yathā* in clauses expressing condition or purpose; *yad* as a conjunction meaning 'that, since, so that, although;' and *yathā* in the sense of *iva*. The passages are very nearly 4,000.

I. The antecedent clause stands first more than 2,000 times, or 50.8 per cent. of the whole number of occurrences. The antecedent is fully expressed in its own clause alone near 1200 times (29.5 per cent.): e. g. *tēna . . . gataṁ rāthēna . . . yēna śācvaḍ ūhāthur dācūse vāsu* (i. 47. 9), 'come with that chariot with which ye have constantly brought good things to the worshipper;' *apō devīr ūpa hwaye yātra gāvāḥ pibanti naḥ* (i. 23. 18), 'I invoke the heavenly waters, where our kine

drink.' The antecedent is expressed in its own clause, and it or a synonym is repeated in the relative clause, 60 times (1.5 per cent.): e. g. *amandan nū maruta stōmo ātra yān me narah crūtyam brāhma cakrá* (i. 165. 11), 'the praise hath pleased me here, O Maruts, what famous prayer ye have made for me, ye men.' The antecedent is expressed in the relative clause, and represented by a pronoun in its own clause, 51 times (1.3 per cent.): e. g. *iyús té yé pūrvatarām āpacayan . . . mārtyāsah* (i. 113. 11), 'gone are they, what mortals beheld her before.' The antecedent is found in the relative clause alone 69 times (1.7 per cent.): e. g. *āpa dahā' rātrir yēbhis tāpobhir ādaho jārūtham* (vii. 1. 7), 'burn away the grudgers with what heats thou didst burn the waster; ' *nā vī jānāmi yād ive dām āsmi* (i. 164. 37), 'I do not understand quite what I am now.' The antecedent is not expressed in either clause, except by a pronoun or adverb, 670 times (16.8 per cent.): e. g. *ihā bravītu yā u tāt cīketat* (i. 35. 6), 'let there speak here whoever knows that; ' *āganma yātra pratirānta ā'yuh* (i. 113. 16), 'we have gone where they lengthen out life.'

II. The relative clause stands first more than 1850 times, or 46.8 per cent. of the whole number of occurrences. The antecedent is fully expressed only in its own clause over 900 times (22.6 per cent.), by noun, pronoun, or adverb: e. g. *yó rāyō 'vānir mahā'n . . . tasmā indrāya gāyata* (i. 4. 10), 'who is a great stream of wealth, to that Indra sing ye: ' *yātra grāvā vādati tātra gachatam* (i. 135. 7), 'where the pressing-stone is uttering its voice, thither go: ' *yātrā hām āsmi tā'n ava* (viii. 75. 15), 'on what side I am, them favor thou.' The antecedent is expressed in the relative clause, and it or a synonym is repeated in the antecedent clause, 56 times (1.4 per cent.): e. g. *yé te pānthāh . . . tēbhīr no adyā pathābhīh sugēbhī rākṣa* (i. 35. 11), 'what paths are thine, by those easy paths guard us this day.' The antecedent is more fully expressed in the relative clause, and represented in the antecedent clause by a pronoun or adverb, 276 times (6.9 per cent.): e. g. *yā' ta ātīh . . . tāyā no hinuhi rātham* (vi. 45. 14), 'what help is thine, with that urge on our chariot; ' *yó ha vām mādhuho dr'tih . . . tātaḥ pibatam* (viii. 5. 19), 'what wine-skin of mead is yours, thence drink ye.' The antecedent is expressed in the relative clause alone 109 times (2.7 per cent.): e. g. *yā indra yūsmo maghavan te āsti śikṣā sākūbhyaḥ* (vii. 27. 2), 'what might, magnificent Indra, is thine, bestow on thy friends.' The antecedent is not expressed in either clause, save by a pronoun or adverb, 526 times (13.2 per cent.): e. g. *yó asmā'n obhidā'saty ādharān gamayā tāmah* (x. 152. 4), 'whoso attacketh us, send thou to lowest darkness; ' *iyām vīsrjīr yāta ābabhā'va . . . só āngī veda* (x. 129. 7), 'whence this creation came into being here, he verily knoweth.'

III. As a third position, the relative clause stands within the antecedent clause 94 times (2.4 per cent.). The same variety of treatment of the antecedent appears here as under the two preceding heads. Examples are: *tāsyā sādhvī'r īṣavo yā'bhīr āsyati nṛcāksasah* (ii. 24. 8), 'his are successful arrows, with which he shoots, men-beholding [ones]' etc.; *çātrum āpa bādhasva dūrām ugró yāḥ çambah puru-hūta tēna* (x. 42. 7), 'drive far away the enemy, O much invoked one—what weapon (?) is terrible, with that one (i. e. with whatever weapon is terrible); ' *muñcātām yān no āsti tanū'su baddhān kṛtām éno asmāt* (vi. 74. 3), 'put away what sin committed is bound to our bodies from us; ' *nahī nū yā'd adhīmāsi' 'ndram kó vīryā' parāḥ* (i. 80. 15), 'for no one, surely, so far as we know, is beyond Indra in might.'

IV. Once more, by a process the reverse of that just noticed, the relative clause takes the antecedent one wholly into itself. This singular arrangement occurs only twice, namely: *yā çīṣṭha indra tām sú no dā mādó vṛṣan* (vi. 33. 1), 'what is the mightiest, Indra, do grant that to us, passion, O hero; ' *yā éka út tām u stu-hī kṛtīnā'n vicarṣanīḥ pātir jajñé* (vi. 45. 16), 'who verily alone, him praise thou, is born the chief lord of men.'

The natural position of the relative word seems to us to be at the head of its clause: and it is in truth found there in the Rig-Veda about 2600 times (65 per cent.); but it has the second place near 1,000 times (24.4 per cent.), the third place over 250 times (6.5 per cent.), the fourth place 81 times (2 per cent.), and so on, in decreasing frequency, down to the ninth place.

The preparation of this paper was suggested by certain brief statements made by Prof. Delbrück in his work on the Use of the Subjunctive and Optative in

Latin and Greek. He there says, in substance, that while the nature of the relative is such that the clause which it introduces should follow the principal clause, it in fact precedes it in most cases in Sanskrit—meaning, apparently, the Veda; or at least including the Veda, since that is the principal source of the examples quoted throughout his volume. In this usage, he declares, which is of secondary growth, the Sanskrit differs from the Greek of Homer. Now if my statistics are correct, it appears that in the Rig-Veda, at least, the relative clause retains its primitive position in a (small) majority of cases. He further states that the two forms of sentence, where the relative clause either precedes or follows the antecedent clause and the antecedent word is expressed in its own clause only, are not very frequent. On the contrary, if we include in these forms the instances where a personal pronoun serves as antecedent, they are half the whole number of occurrences. Again, we are told that the cases where the antecedent or a synonym is repeated in the relative clause are common. I find them uncommon, being less than 3 per cent. of the whole number. Yet further, it is maintained that by far the most frequent arrangement is that in which the antecedent word appears in the relative clause only; that when the latter follows the principal clause, there is no reference in that clause to the antecedent; and that, when it precedes the principal clause, the antecedent is generally represented in the latter by a form of the demonstrative *ta*. The last only of these three statements seems to be correct, so far as the Rig-Veda is concerned. It would appear that the author's views rested upon general impressions derived from reading, rather than upon any enumeration of instances.

6. Studies on the Mahāyāna or Great Vehicle School of Buddhism, by Mr. Wm. W. Rockhill, of Baltimore, Md.

The object of Mr. Rockhill's paper was to set forth some of the principal features of the doctrines of the Mahāyāna school from hitherto unpublished Tibetan documents, and also to show the differences that exist between the older *mahāyāna* sūtras, of which the Sūtra in 42 Chapters (see Proceedings for Oct. 1880, above, p. 1.) is an example, and those of later dates. The following is a brief abstract.

The oldest form in which we find the sūtras of the Great Vehicle is furnished by the Sūtra in 42 Chapters, in which the different points considered are set forth in unpretending, plain language, without any of the repetitions or embellishments of more recent works. The doctrine that is taught does not differ to any great extent from that of primitive Buddhism.

The sūtras on transcendental science (*prajñā pāramitā* sūtras) expose the more perfected form of teaching of the Mahayanists of the Madhyamika school. The object of all these works is thus defined by Eug. Burnouf (Intr. à l'hist. bud. ind., p. 483): "Les livres de la *prajñā pāramitā* sont consacrés à l'exposition d'une doctrine dont le but est d'établir que l'objet à connaître ou la perfection de la sagesse n'a pas plus d'existence réelle que le sujet qui doit connaître ou le Bodhisattva, ni que le sujet qui connaît ou le Bouddha."

The *Vajrachedika* (*Rdo-rje gchod pa*) is a good sample of these works. It is quite short (18 folios in the Tibetan text), and may consequently be considered as older than the similar works in 100,000 and 8,000 ślokas. This text differs in many respects from the Chinese, an English translation of which was given in 1864 by Mr. S. Beal (Jour. Roy. As. Soc'y, new series, vol. i.). The "Histoire de la vie et des voyages de Hiouen Thsang," p. 310, gives some of the objections to Kumārajīva's Chinese version (the one followed by Mr. Beal). The Tibetan text approaches much nearer the Sanskrit original, of which a copy exists in the Bibliothèque Nationale (fonds Burnouf, No. 34).

The founder of the Madhyamika school is said to be Nāgārjuna (or Nāgaseṇa); but from different passages of Tāranātha and of the work of the biographers of Hiouen Thsang (p. 274), "Kumārajīva was a contemporary of Aśvaghoṣa, Deva, and Nāgārjuna," etc., we conclude that he was the great representative of his school before it assumed its definite form. According to the above statements, he must have lived towards the end of the IVth and commencement of the Vth centuries A. D.

The *Kāyatraya* sūtra, which belongs probably to the Yogāchārya sect of the Mahāyāna school, is a short text taken from vol. xxii., *mdo* section (fol. 81a-b),

of the *Bkaḥ-ggyur*. It teaches that all Buddhas are endowed with three bodies, the *dharmakāya* 'the body of the Law,' the *sambhogakāya* 'the body of perfect acquirement,' and the *nirmāṇakāya* 'the body incarnate.' When they have finished their ministry in this world, they divest themselves of the *nirmāṇakāya*, but retain in the Parinirvāṇa the two other purer forms, of which they have become possessed on account of their omniscience and many perfections. This text differs considerably from the one mentioned in Julien's *Si-yu-ki* (liv. iv., p. 240, note).

The third and last sūtra, the *aparimita āyurjñāna* sūtra, seems to be of very recent origin. The text that has here been used was published by the Baron Schilling von Cannstadt. The Buddha does not instruct Kumārabhūta Manjuṣrī on any point of the doctrine. He simply tells him that, if the present work is copied, recited, or even kept in the house, it will greatly prolong life. The sūtra or sermon has here become a magical formula, the simple repetition of which is all that is necessary to salvation.

The *aparimita āyurjñāna hrdayanā dhāraṇī*, the sequel to this sūtra, professes to contain in a charm of a few words all the virtue and power of the sūtra itself.

The *tantrika* school, to which the last sūtra belongs, was introduced into Tibet in the XIth century, and has been predominant there since that time.

7. On Lepsius's Views of African Languages, by Prof. W. D. Whitney, of New Haven.

Prof. Lepsius has recently (1880) published a Nubian Grammar, the fruit of studies begun during his celebrated expedition to Egypt and Ethiopia, in 1842-6, and afterward continued under favorable circumstances in Germany. It is worked out with the thoroughness, and in the clear and attractive style, which are characteristic of its author. Besides the grammar itself (200 pages), there is a body of Nubian texts (60 pages), a Nubian-German and German-Nubian vocabulary (180 pages), and an appendix (60 pages) on the dialects of the language, including also a criticism of Reinisch's work on the Nubian. To the whole is prefixed an Introduction (126 pages), on the classification and relationships of African languages in general; this will interest, of course, a wider circle than the rest of the volume, and is worthy of the most careful attention.

Lepsius believes all the African races proper to exhibit only a single physical type; and in addition to its ordinarily recognized characteristics he calls attention to a forward tilt of the pelvis, which gives a peculiar bearing to the body. But he regards the northern and northeastern peoples, the so-called Hamitic races, as early intruders from Asia, followed later by the Semites, these two divisions being ultimately related with one another. The whole southern peninsula of the continent, now, from 7° or 8° N. L. nearly to the Cape, being filled (with the insignificant exception of the Hottentot and Bushman) with the dialects of a single well-defined family, the South-African or Bantu, and there being between these and the Hamitic a broad band of heterogeneous tongues, falling into numerous and discordant groups or families, he holds the Bantu and the Hamitic to be the two original language-types, and the others to be the product of their mutual modification and mixture. The generalization is a grand and striking one: and if it be true, its demonstration in detail will constitute a highly important division of linguistic history. Without laying any claim to the detailed knowledge that would enable him to criticise it with authority, Prof. Whitney reported succinctly the author's views and arguments, and commented on them, especially on those to which he was obliged to take exception. In his opinion, there were too many questionable points involved in it to allow of our accepting it otherwise than provisionally, as a basis for further investigation.

There is, in the first place, the capital question whether the influence of one language can so metamorphose the structure of another as the theory would imply. The prevalent views as to language-mixture are called in this work an "assumption" and "prejudice;" but they appear rather to be the best induction thus far possible from the known and indisputable facts of mutual influence of languages, and cannot be put down except by actual proof of their inapplicability to a given case; if an offered solution of the African problem simply takes for granted their

falsity, we are driven to inquire whether some other solution is not possible. Prof. Lepsius draws up a list of twelve leading particulars in which the Bantu and Hamitic tongues differ, and by them tests the intermediate tongues, ascribing the agreements and disagreements of the latter to the influence of the one or of the other element. The method is not without its dangers, since the differences of any two languages may be taken as test, and other tongues will be found to stand upon the side either of the first or of the second with regard to each point of difference (for a door must be either shut or open); the question of origin of the discordance is still left to be settled. Two of the adopted criteria are of wholly indecisive value, because even the Hamitic dialects themselves differ in regard to them; two or three more are such phonetic matters as even nearly related tongues of other continents are sometimes found to differ upon; the rest arrange themselves mostly under two heads: prefix or suffix structure, and gender founded on sex. As to the first, the intermediate tongues are very discordant, and many of the facts brought to notice by Lepsius are in the highest degree curious and interesting; but it seems still to be open to question whether more of it all than he is inclined to allow, in Bantu and elsewhere, may not be the product of positive growth out of a less developed general condition, and not mere decay and metamorphosis of an original structure most nearly represented by the Bantu. We should not limit too narrowly the possibilities of new production in agglutinative tongues: our author himself gives a very notable example of this, in exhibiting the acquisition by certain Upper Nile dialects, not under Hamitic influence, of an apparent sexual gender distinction, growing, as he believes, out of an earlier, grosser and more material, distinction between stout and puny. Perhaps the wide territorial domain of the Bantu gives a false impression of its predominant importance as a factor in the history of African language; there is nothing in its present extension to prove that it might not have been originally a coördinate member of the congeries of Central African groups, to which favoring circumstances, along with the superior capacities of its speakers, have given a very exceptional growth; whether there is anything in the language itself to show the contrary, remains to be ascertained.

The subject of gender is one of leading interest in the Introduction, and the highest degree of value as a criterion is attributed by the author to this grammatical element. He holds, for example, the absence of gender in Nubian to be a sufficient indication that that language is fundamentally Central African; though in all the other respects considered by him it agrees with the Hamitic. He holds the Hottentot to be Hamitic solely because it has gender, while in other points of structure and in material no trace of anything Hamitic is discoverable about it, and while the physical type of the race is purely, if not exaggeratedly, African; he believes the Hottentots to represent a branch of Hamitic stock, severed from the rest by the crowding outward of the Bantu peoples, and pushed southward, with an ever-increasing admixture of African blood, till its Hamitic characteristics were completely swamped. And this, although he has shown us an example, as noticed above, of the virtual acquisition of gender by a body of African dialects, and the Persian offers a familiar example of a language of our own family that has utterly lost the distinction. He regards the common (and nearly exclusive) possession of gender by the Indo-European, Semitic, and Hamitic families as proving their ultimate relationship: the fact is certainly a very striking one, and that it may have so decisive a bearing need not be too dogmatically denied; while at the same time we are justified in regarding this as unproved, and even in the highest degree questionable, considering how probably the distinction appears to have been worked out in the course of the structural growth of each division of language. Prof. Lepsius endeavors to find a psychological basis for the African classes, on the one hand, in the attitude of African savage man toward nature, and for the genders of the higher races, on the other hand, in the regulation of the relations of the sexes which made family organization the starting-point of the superiority of those races. Various considerations were adduced, however, to cast doubt upon the sufficiency of either explanation. Thus, as regards the latter, it does not seem clear that a moral organization of the family, in our sense, any more than the virtues of benevolence and justice, are what advances a race that is struggling upward toward power; then, all languages have

distinct names for human beings in all their various relations, and can by help of these constitute the family as purely as they have moral sense for; and it is no honor done to the element of sex to extend it fancifully to everything in creation, any more than it would show a keen sense for form to call birds and the weather square, and goodness and headaches round; and the most important words designating gender in Indo-European, *father, mother, brother, sister, daughter*, have no gender characteristic, either in derivation or in inflection. On the whole, gender remains still the same difficult and trying problem as hitherto: unless we are to see in the special gender-development out of a distinction of size and dignity on the part of the group of Nile languages referred to above a valuable hint as to what the history of the same thing may have been in our own language.

Other of Prof. Lepsius's general views laid down in this work were reported: thus, for example, his repudiation of "Turanian" affinity for the race that laid the foundation of Mesopotamian culture, and his reduction of the latter to an Egyptian origin through Cushite mediation. The hope was expressed that he would take occasion to write himself out more fully on this subject, with statement of his reasons.

8. On a Manuscript Fragment of the Samaritan Pentateuch, by Prof. Isaac H. Hall, of Philadelphia; presented by Prof. Toy.

Some days ago, through the kind offices of Rev. Dr. W. Hayes Ward, I came into possession of a parchment folio, or pair of leaves, written in the Samaritan character, quite old, and somewhat obscure. It was obtained from a Jew, who stated that he brought it from Jerusalem fifty years ago.

The size of each leaf is $4\frac{1}{2} \times 3\frac{1}{2}$ inches; of the written page, $3 \times 2\frac{1}{2}$ inches. It is written with twenty-four lines to the page, except that a word is pushed into the twenty-fifth line on two of the pages, and on another the same is true of the punctuation at the end of a chapter. The style of writing is that of ordinary Samaritan manuscripts, with a fine point or dot to separate the words, here and there replaced by a punctuation mark like a colon. At the end of a chapter the punctuation is like that seen in Petermann's edition of the Book of Genesis in Samaritan characters. Spaces are left between the letters toward the end of a line when necessary, so that the last letters of the lines may stand in an upright, even column. No words are divided at the end of a line. A hole in the parchment, older than the writing, divides some words, in one case separating the letters by more than half an inch. Paragraphs are marked by leaving a whole line blank.

The manuscript is a fragment of the Samaritan Pentateuch, containing Numbers xxvii. 24 (beginning at **אֵת אִשְׁרֵי עֵשָׂה**)—xxviii. 16; xxxii. 23–42. An easy computation shows that just eight pages, or four leaves, or two folios, were inside this folio in the quire when the MS. was complete. It was therefore the middle folio, or one of the outer folios, of the quire; if the quire was a *ternio*, then it was the outer one, which I do not think was the case.

The writing begins in a verse which I have called 24, above; but it is a verse not there in the Hebrew, added after verse 23 from Deuteronomy iii. 21, 22, slightly altered. The paragraph and chapter end with this extra verse in the MS.; and the next paragraph ends with verse 10. Another paragraph ends with verse 15; and the page ends with the third word of verse 16, **בְּאֵרֶכְ(עֵי)**, of which last word only the first **ב** can be read without a lens, and the last two letters are hopelessly defaced. The previous word is interrupted by the hole: thus, **וְהָיָה**.

The next leaf begins with Numbers xxxii. 23, and has paragraph divisions at the end of verses 28 and 33. The last page ends with the chapter, at verse 42.

In connection with the following collation with Blayney's edition of the Samaritan Pentateuch (Oxonii, 1790) are noted the chirographical peculiarities not mentioned above. When not otherwise stated, or a parenthesis not used, the variation from Blayney's text is to be found in his lower margin as a manuscript reading. I have not thought it worth while to repeat them from his edition.

Chap. xxviii. 2, **לֵאשִׁי** for **לֵאשָׁה**. Here the **י** seems to be a re-inking of a faded **ה**, and not a correction, or change of mind of the original scribe. The two letters

resemble each other very nearly in the script.—**ניחח** for **ניחי**. This is slightly different from Blayney's variant, which is **ניחי**.

Verse 5. **ועשירית** for **ועשרית**.

האיה for **האיה**. Here the **ע** is written over a faded **א**. It is difficult to account for this change in restoration except by ignorance. This variant is of course not given by Blayney.

Verse 7. **ונסכו** for **ונסכיו**.

Verse 8. **ונסכין** for **ונסכין**.

Verse 9. Same as above in verse 7.

(Verse 12. **האחור** is omitted by error of scribe, but added by a later hand above the line.)

Numbers xxxii. 24. **וגררות** for **וגרות** by mere error, but the **ר** is added above the line *prima manu*.)

(Verse 26. **טפנו** for **טפנו**, but the superfluous **ה** has a stroke drawn obliquely across it by a later hand in token of erasure.)

Verse 28. **אבות** for **אבות**.

(Verse 29. **את ארץ** for **את ארץ**; but the **ה** has a horizontal stroke drawn above it *prima manu*, in token of erasure.)

(Verse 33. **ארץ** for **ארץ**; but the **ה** is added above the line *prima manu*.)

Verse 38. **מוסכת** for **מוסכות**.

שם for **שמה**.

So far as can be seen from this comparison, the manuscript appears to be a very respectable one. It is also evidently ancient; but how ancient, I have no means of determining. The collation discloses only one real variation from Blayney's text or margin; and that of no great importance. Its real interest lies in its disclosing the fact of a partial re-inking, and a correction both by the original scribe and a later hand, and the manner of so doing. It is worth while to remark that there is one vacant space, in one of the lines, large enough for a whole word. I am unable to determine whether this is an actual erasure, or left blank originally because of a defect in the surface, or to make the line come out even. In some cases the spacing seems to be done for the latter purpose throughout a whole line, sometimes only through the last half, but oftener only in the last word or two. One line leaves wide spaces between both the words and the letters of a word for that purpose.

9. On the Assyrian Monuments in the Museum of Fine Arts at Boston, by Rev. Selah Merrill, of Andover, Mass.

These monuments consist of seals, a number of casts of important relics, and one very fine slab, recently received, of Assur-nazir-pal, B. C. 885-860. This is similar to other slabs of this king that have previously been brought to the country, and from its perfect preservation it may be classed among the very best of them. The inscription upon it is clear, and is generally known as the "Standard Inscription." A detailed account of all the Assyrian monuments then known as having been brought to America, accompanied by translations, was presented to the Society by Mr. Merrill at its meeting in October, 1874. The design of the present paper was first to call attention to the desirability of supplying our museums with casts of these valuable relics and records from Nineveh and Babylon; secondly, to point out some new features in the slab here mentioned; and thirdly, to describe briefly some new inscriptions of Assur-nazir-pal that have lately been discovered.

Dr. Ward, of New York, had brought with him copies of all the recently discovered Hittite inscriptions, but the lateness of the hour rendered their exhibition impracticable.

After passing a vote of thanks to the American Academy for the use of its room, the Society adjourned until Wednesday, Oct. 26th, 1881.